

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: TOIVOLA ET AL

Serial No: 497,813

Filed: May 25, 1983

For: NOVEL TRI-PHENYL ALKANE AND ALKENE DERIVATIVES
AND THEIR PREPARATION AND USE

PRIOR ART STATEMENT

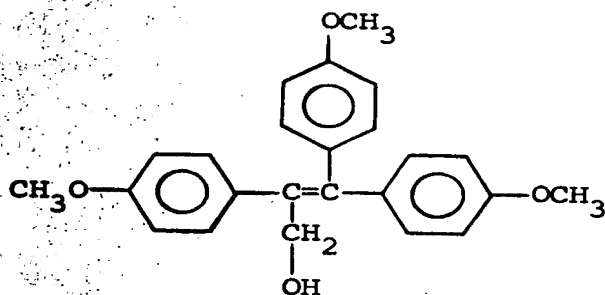
UNDER 37 CFR 1.97-1.98

Honorable Commissioner of Patents & Trademarks
Washington, D.C. 20231

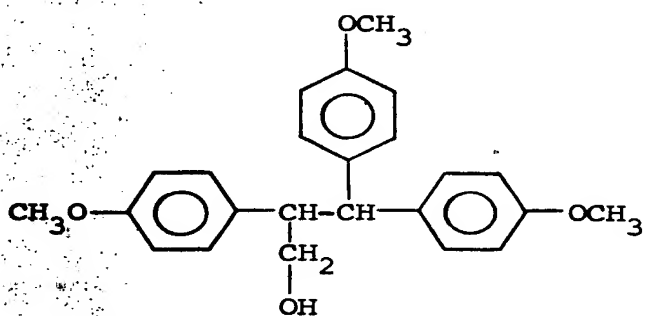
Sir:

Applicants file herewith a Table summarizing the relationship between the claimed compounds and the closest known prior art. This table details various compounds having similar structural features to those in claim 1 for each compound. The table lists the known compound itself, the proviso which excludes it in claim 1 of the present application, any utility disclosed in the relevant reference, and the reference in question. Copies of all the relevant references are also enclosed.

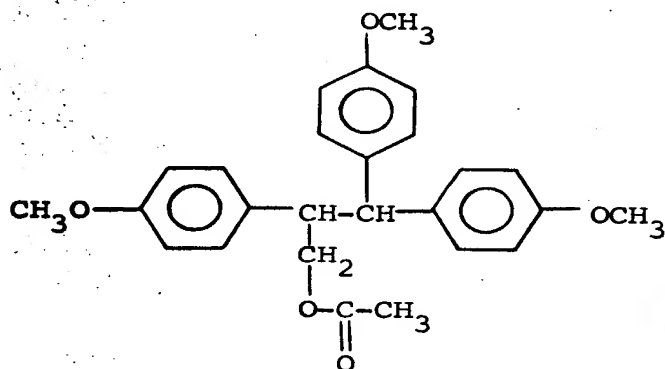
All of the known compounds have been excluded from the claims by means of provisos a to e. No utility of the prior art compounds has been disclosed, except the following cases:



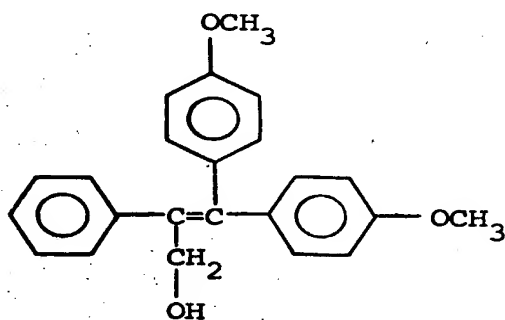
GB 1015787 page 1 lines 10 to 19 discloses that this compound possesses estrogenic activity. Farmaco 15 1960 compares the estrogenic activity of this compound to estrone. In neither of the two cases were the anti-estrogenic or progestanic effects noted, or their activity against hormone-dependent tumours (present application page 4 lines 26 to 33).



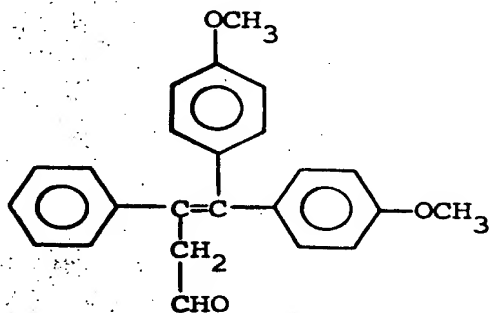
and



Farmaco 15 1960 discloses that these compounds have weak estrogenic activity, but the anti-estrogenic or progestanic effects are not noted.



and

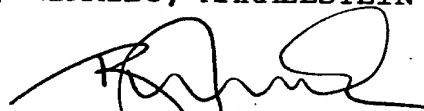


The abstract of Acta Pharmaceutica Sinica 15 (11) 1980 discloses possible estrogenic activity of these compounds, but no anti-estrogenic and progestanic effects are noted.

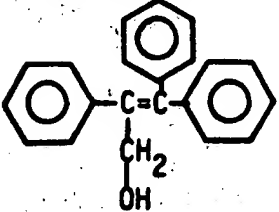
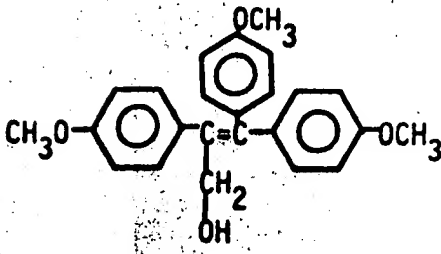
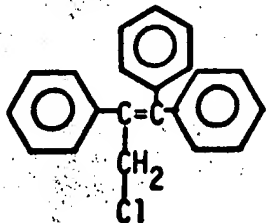
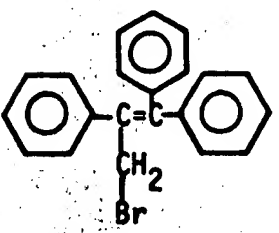
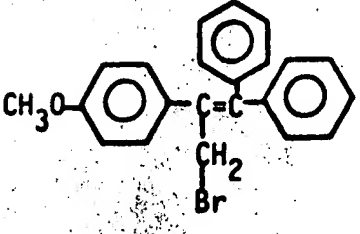
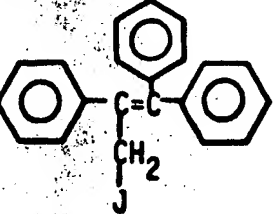
Thus the prior art is not relevant to the present application, neither in structure nor disclosed utility. In most cases, any utility of the compounds has been of secondary importance to the authors of the reference.

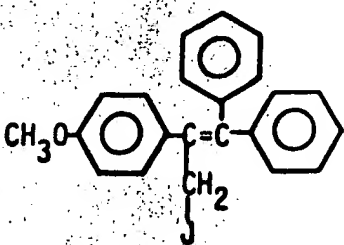
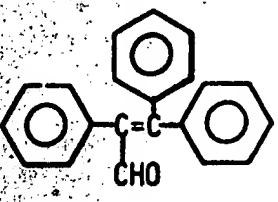
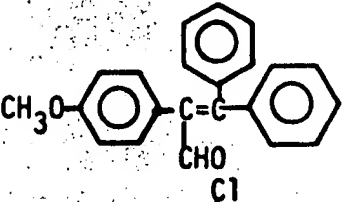
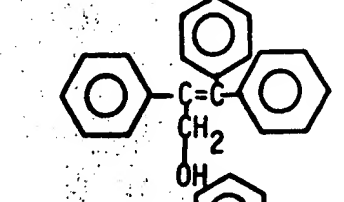
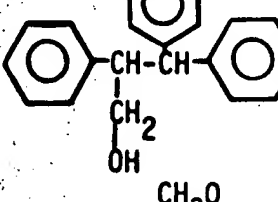
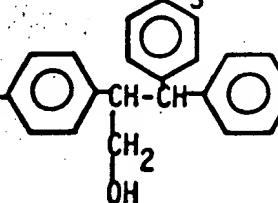
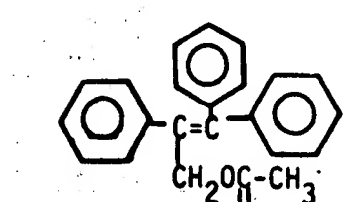
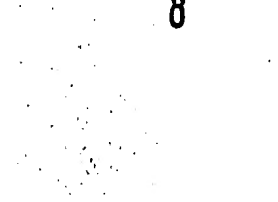
Respectfully submitted,

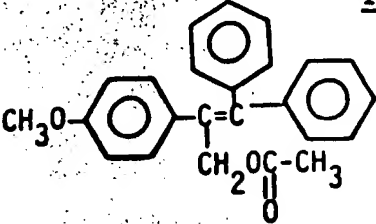
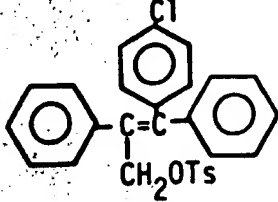
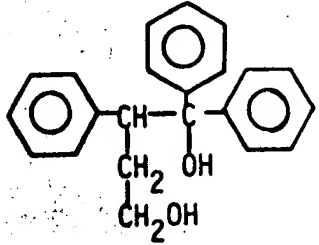
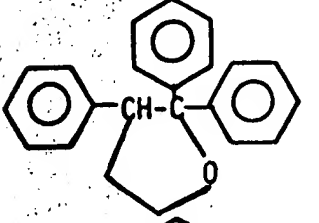
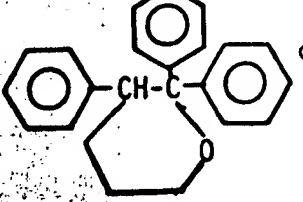
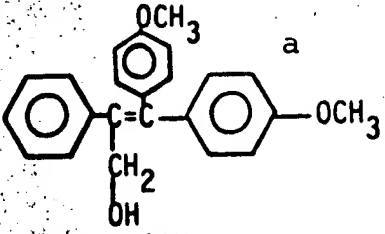
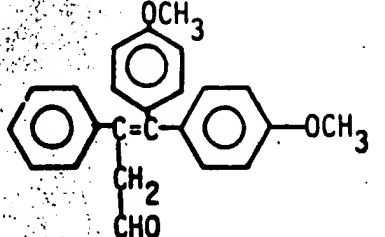
ARMSTRONG, NIKAIDO, MARMELSTEIN & KUBOVCIK

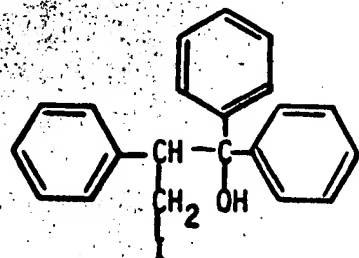
A handwritten signature in dark ink, appearing to read 'Ronald J. Kubovcik', written over the printed name.

Ronald J. Kubovcik
Reg. No. 25,401

<u>Compound</u>	<u>Excluded by Proviso</u>	<u>Disclosed Utility</u>	<u>Reference(s)</u>
	a	none — —	J.Amer.Chem.Soc. 77 1955 p4566 J.Prakt.Chem. 19 1953 p175 J.A.C.S. 54 1932 p2046
	a	estrogenic activity active estrogenic activity (abstract 57:16508f)	GB 1015787 p1 Farmaco 15 p634 1960
	a	—	J.Prakt.Chem. 19 1963 p175
	a	none none none none none	Bull.Chem.Soc.Japan 27 1954 p233 J.Chem.Soc.B. 1976 (6) p606 and p607 J.Chem.Soc.B. 1967 (6) p601 J.Org.Chem. 36 (15) 1971 p2176 J.Org.Chem. 35 (10) 1970 p3399
	a	none none	J.Chem.Soc.B. 1967 (6) p607 J.Chem.Soc.B. 1967 (6) p601
	a	none none	J.Chem.Soc.B. 1967 (6) p607 J.Org.Chem. 35 (10) 1970 p3398

<u>Compound</u>	<u>Excluded by Proviso</u>	<u>Disclosed Utility</u>	<u>Reference(s)</u>
	a	none	J.Chem.Soc.B. 1967 (6) p607
	a	none	Recl.Trav.Chim. Pays.Bas. 92 1973 p849
	a	none	J.Chem.Soc. B 1967 (6) p609 J.Org.Chem. 36 (15) 1971 p2177 J.Org.Chem. 35 (10) 1970 p3398 Ber. 668 1933 p54
	a	none	Recl.Trav.Chim. Pays.Bas. 92 1973 p849 J.Chem.Soc. B. 1967 (6) p609
	b	none	J.Amer.Chem.Soc. 77 1955 p4566
	a	none	J.Amer.Chem.Soc. 81 1954 p1181
	a	weakly active estrogenic activity (abstract: 57:16508f)	Farmaco 15 1960 p634
	a	none	J.Chem.Soc. B. 1967 (6) p608

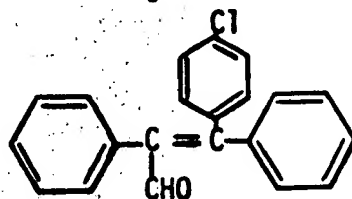
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 <p>b</p> <p>Ts = tosyl</p>		none	J.Amer.Chem.Soc. 77 1955 p4566
 <p>c</p>	—		Ber.Jahrg. 87. 5 1954 p630
 <p>c</p>		none	J.Org.Chem. 30 (1) 1965 pp58-60
 <p>d</p>		none	Tetrahedron 1978 34(16) p2588
 <p>a</p>		estrogenic activity (abstract: 95:969j)	Acta Pharmaceutica Sinica 15(11) 1980 p651
 <p>a</p>		estrogenic activity (abstract: 95:969j)	Acta Pharmaceutica Sinica 15(11) 1980 p651

CompoundExcluded
by
ProvisoDisclosed
UtilityReference(s)

a

none

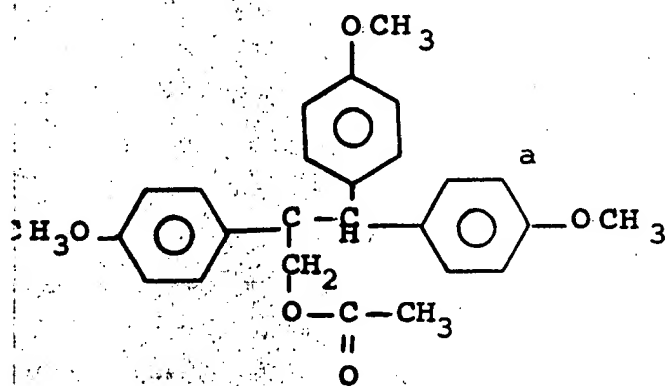
J.Org.Chem. 36 (15) 1971 p2178



b

none

J.Amer.Chem.Soc. 77 1955 p4566



a

possibility
of estrogenic
activity
(abstract
57:16508f)Farmaco 15 1960 p634